#### FINDING OF NO SIGNIFICANT IMPACT

## Greenway Trail Segments in Undisturbed Areas Grand Canyon National Park

The purpose of the proposed project is to provide a greenway pedestrian/bicycle/equestrian trail from the future Grand Canyon Transit Center in Tusayan (located near the park boundary) to Canyon View Information Plaza (the new orientation/transportation hub) within Grand Canyon National Park (South Rim). This trail would provide an alternative means for non-motorized access into the park. It would also provide a separated experience from the existing road and vehicles entering the park.

The proposed greenway trail is needed because:

- A separate pedestrian/bicycle/equestrian trail is needed to allow visitors to approach the rim on a more human scale, under their own energy, and at their own pace.
- Biking and walking is dangerous on the crowded Arizona State Highway 64.
- There is no existing trail connection on the South Rim for the users of the Arizona Trail to enter the park and cross the canyon.

In April 2002 the National Park Service (NPS) prepared a *Revised Environmental Assessment* (EA) and Assessment of Effects for Greenway Trail Segments in Undisturbed Areas. This EA, in accordance with the National Environmental Policy Act, analyzes the impacts that would likely result from implementation of the project. The EA evaluated two alternatives, Alternative A (No Action) and Alternative B (Proposed Action).

#### PREFERRED ALTERNATIVE

The preferred alternative (Alternative B) proposes to construct approximately 2.3 miles of trail in previously undisturbed areas in Grand Canyon National Park to complete a seven-mile trail from Canyon View Information Plaza to the Grand Canyon Transit Center just north of Tusayan. The proposed trail would be ten-feet-wide with a hardened surface and a stabilized shoulder made from a mix of aggregate and topsoil. An area 12 to 14-feet-wide would be temporarily disturbed during construction. If staging areas are needed for construction, they would be located in areas that are already disturbed (e.g. existing trail corridors or utility clearings). Areas along the trail that may experience heavy runoff may be paved to prevent erosion. Design and construction would promote sustainability where possible and would strive to minimize impacts on the land.

The trail would provide a possible extension of the Arizona Trail into the park for hikers, cyclists, and equestrian users – motorized vehicles would not be allowed except for maintenance activities. Areas along the trail with dense vegetation may be cleared below the shoulder height to allow safe maneuverability for cyclists. The trail would become part of the overall trail system in the park and would be included in routine patrols by park rangers. Construction and design would be completed in accordance with the Americans with Disability Act (PL 101-336, 1990) and the Uniform Federal Accessibility Standards for recreational trails. Although motorized vehicles would not be allowed on

the trail, emergency access using motorized vehicles would be permitted. American Association of State Highway and Transportation Official (AASHTO) standards would be applied where appropriate. Safety and traffic control signs would be located along the trail as needed.

The two portions of this trail that comprise the proposed action are located in the following areas:

- A 1.6 mile trail segment that begins south of Canyon View Information Plaza off the utility corridor and travels south about ½ mile west of Highway 64 and then crosses Highway 64 just south of the highway's junction with Desert View Drive. The trail segment then parallels the east side of Highway 64 and continues south to a point where it connects with an existing two-track trail.
- A 0.7-mile trail segment that starts across Highway 64 from Moqui Lodge (near the park boundary) and continues northeast up a ravine and then connects with an existing two-track trail.

The mitigation measures listed below are considered part of the preferred alternative and will be followed during project implementation. These actions were developed to lessen the potential for adverse impacts from implementing the preferred alternative, and have proven to be very effective in reducing environmental impacts on previous projects.

- To minimize soil erosion at the project site, standard erosion control measures including silt fence and sandbags will be incorporated into the proposed action. Any revegetation efforts will use site-adapted native species and/or seed.
- Construction zones will be fenced with construction tape, snow fencing, or some similar material
  before any construction activity begins. The fencing would define the construction zone and
  confine activity to the minimum area required for construction. All protection measures would
  be clearly stated in the construction specifications and workers would be instructed to avoid
  conducting activities beyond the construction zone as defined by the construction zone fencing.
- Existing populations of exotic vegetation at the construction site will be treated prior to construction activities.
- All construction equipment that leaves the paved road will be pressure washed prior to entering the project site.
- The location of staging areas will be limited to existing roads or other previously disturbed areas.
- Parking of vehicles will be limited to the staging areas and existing roads.
- Any fill material will be obtained from a park-approved source.
- All areas disturbed by construction will be revegetated using site-adapted native seed and plants.
- Native plants will be salvaged from the project site and used to revegetate the site after construction activities have been completed. Plants will also be propagated according to NPS policy, from seed collected on adjoining areas to protect local genotypes.
- Post project exotic plant monitoring will be conducted in the project area as time and funding allows.
- To prevent damage to the existing vegetation, hitching posts will be provided on the trail to tie horses at rest stops and at the ends of the trail.

- All construction equipment and materials that are brought on site will be inspected for exotic
  pests. Any exotic pests that are found will be removed prior to equipment or materials
  entering the park.
- Construction workers and supervisors will be advised to keep their work site clean of debris, especially food wrappers and waste that may attract wildlife. Workers and supervisors will also be instructed to not feed the wildlife.
- Signs will be posted at both ends of the trail that instructs users to "not feed the wildlife". Signs will also advise users that no drinking or restroom facilities exist along the 7-mile trail.
- All trashcans placed along the trail will be "wildlife-proof."
- Construction workers and supervisors will be informed about special status species that are
  known to occur in the project area. If previously unknown special status species are discovered
  during construction, all work in the immediate vicinity of the discovery will be halted until Park
  staff re-evaluates the project and the work modified to allow for any protection measures
  determined necessary to protect the special status species.
- If a California condor occurs at the construction site, construction will cease until it leaves on its own or until techniques are employed by permitted Park staff or Peregrine Fund personnel that results in the individual condor(s) leaving the area.
- Construction workers will be instructed to avoid interaction with condors and to immediately contact the appropriate Park or Peregrine Fund personnel when condor(s) occur at the construction site.
- The construction site will be cleaned up at the end of each workday (i.e. trash disposed of, scrap material picked up) to minimize the likelihood of condors visiting the construction site.
- To prevent water contamination and potential poisoning of California condors or other wildlife, a vehicle fluid-leakage and spill plan will be developed and implemented. The plan will include immediate clean up of any hazardous substance. The plan will define how each hazardous substance will be treated in case of leakage or spill.
- If condors are detected roosting, perching, or feeding in an area accessible to visitors using this trail corridor, portions of the trail may be closed temporarily until the condor(s) leave(s) on its own, completes foraging activities, or techniques are employed by permitted Park staff or Peregrine Fund personnel that results in the condor(s) leaving the area.
- Those portions of the trail within 0.5 mile of the canyon rim will have construction activities restricted to the non-breeding season for the Mexican Spotted Owls (September 1 to February 28) for the duration of the project.
- Heavy construction equipment will not idle for more than five minutes.
- Construction areas will be sprinkled with reclaimed water to reduce fugitive dust.
- A curfew will be imposed that limits construction activities in the summer (May 1 September 30) to the hours between 8:00 am and 6:00 PM and in the winter (October 1 April 30) to the hours between 9:00 am and 5:00 PM.
- If previously unknown archeological resources are discovered during construction, all work along trail sections will be halted until the resources are identified and documented by a qualified archaeologist from the NPS, and an appropriate mitigation strategy developed, if necessary, in accordance with the stipulations of the 1995 Programmatic Agreement Among the National Park Service, the Arizona State Historic Preservation Office, and the Advisory Council on Historic Preservation Regarding the General Management Plan/Environmental Impact Statement, Grand Canyon National Park, Arizona.

- All workers will be informed of the penalties for illegally collecting artifacts or intentionally damaging any archeological or historic property. Workers will also be informed of the correct procedures if previously unknown resources are uncovered during construction activities.
- Should unknown buried deposits be located, data recovery excavations will be undertaken.
  These subsurface survey and data recovery efforts would be guided by a project-specific
  research design. Additionally, the NPS would begin consultations under the Native American
  Graves Protection and Repatriation Act in the event that buried human remains are discovered
  during archeological excavations or project development.
- All known archaeological sites that could be indirectly impacted by use of the trail alignment
  will be monitored annually by the NPS for indirect impacts associated with trail users venturing
  off the designated trail. Monitoring will consist of, at a minimum, photo documentation and
  written descriptions of the sites. In the event that impacts are observed, the Cultural Resource
  Manager for NPS will determine an appropriate mitigation strategy, which may include data
  recovery plan or preventive measures.

#### ALTERNATIVES CONSIDERED

The EA evaluated two alternatives, the Preferred Alternative (Alternative B) and the No Action Alternative (Alternative A). The Preferred Alternative is described above. The No Action Alternative is described below:

Alternative A, No Action, would keep the existing situation as it is today. Visitors, residents, and employees wanting to walk or bicycle to and from the park and Tusayan would use the existing Highway 64 shoulders. The more adventurous visitors could use some of the existing access paths through the National Forest and the park to keep away from Highway 64 and its traffic, but they would have to cut back to Highway 64 roughly one mile south of Canyon View Information Plaza and travel this last leg on the highway.

#### ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act of 1969 (NEPA), which guides the Council on Environmental Quality (CEQ). The CEQ provides direction that the environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101 in consideration of the following points:

- fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The preferred alternative is the environmentally preferred alternative. Potential resource impacts, visitor impacts, and mitigation measures were carefully reviewed. The preferred alternative best strikes a balance between the necessity of providing an improved, safe, and accessible trail to support a high quality visitor experience in the park with preservation of the park's natural and cultural resources.

# WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Impacts that may be both beneficial and adverse. As fully discussed in the environmental assessment, the preferred alternative will not affect geology; water quality; prime and unique farmland; soundscape; floodplains; wetlands; state listed special status wildlife and plant species; general terrestrial, aquatic and wildlife habitat; federally listed wildlife and plant species (except the California condor and Mexican spotted owl, see below); local or regional socioeconomics; minorities or low-income populations or communities; or ethnographic resources.

Implementation of the preferred alternative may have a direct short-term minor impact to soil in the form of erosion; long-term minor impacts to biotic communities due to a minor loss of vegetation and increased risk of spread and introduction of exotic plant populations following construction; negligible long-term adverse impact to archeological resources; short-term impacts to air quality would be minor and long-term impacts to air quality are expected to be minor; and long-term moderate beneficial impact to visitor experience and recreation resources.

After applying the Advisory Council on Historic Preservation's criteria for adverse effects (36 CFR, Part 800.5, Assessment of Adverse Effects), implementation of the preferred alternative would not have an affect on any National Register eligible sites or properties. No ethnographic resources are known to exist within the project area; therefore, no impacts are anticipated. The State Historic Preservation Officer concurred on this assessment of effects on January 10, 2002

Implementation of the preferred alternative may affect, but is not likely to adversely affect the federally listed California condor and Mexican spotted owl. This determination received concurrence from the U. S. Fish and Wildlife Service on January 8, 2002.

**Degree of effect on public health or safety**. This project has no affect on public health and improves public safety by providing a separate trail for visitors away from the highway.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas. As fully discussed in the environmental assessment, geological resources, archeological resources, historic resources, ethnographic resources, prime farmlands, and wetlands will not be affected by implementation of the preferred alternative. No wild and scenic rivers are near the area of the project and none will be affected by implementation of the preferred alternative. No ecologically critical areas, including critical habitat for threatened, endangered, or proposed species, have been designated in the project area and none will be

affected. Implementation of the preferred alternative would result in a "no historic properties affected" determination. Implementation of the preferred alternative would result in a "may affect, not likely to adversely affect" determination for California condor and Mexican spotted owl. Consultation with concerned tribal officials, Arizona State Historic Preservation Officer, and U. S. Fish and Wildlife Service has been completed.

Degree to which effects on the quality of the human environment are likely to be highly controversial. There were no highly controversial effects identified during either preparation of the environmental assessment or the public review period.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks. There were no highly uncertain, unique or unknown risks identified in the environmental assessment or during the public review period.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration. The preferred alternative neither establishes a precedent for future actions with significant effect nor represents a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Impacts of the preferred alternative identified in the environmental assessment were found to be cumulatively negligible or have no effect. The greenway trail benefits the visitor experience by increasing the number of ways in which visitors can experience the park and this is an objective stated in the General Management Plan in 1995. The trail will present a moderate positive effect on the visitor experience.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources. The potential for indirect impacts exists for at least eight of the nine known archaeological sites adjacent to the trail. These sites are not in immediate danger of being impacted by the proposed project, but could be affected by users venturing off the trail. However, the future volume of use of the trail is unknown and whether the users would stay on the trails and leave the sites alone is also unknown. Therefore, an archaeological site-monitoring program would be initiated to determine if trail usage would result in indirect impacts to these cultural resources. This monitoring program is included in The Grand Canyon Village Trail Enhancement Project Mitigation Plan, which has received concurrence from the Arizona State Historic Preservation Office. If impacts are found to be occurring from trail use, then the effected sites would be mitigated according to the plan and subsequent site-specific mitigation plans.

If previously unknown archeological resources are discovered during construction, all work in the immediate vicinity of the discovery will be halted until the resources are identified and documented. An appropriate mitigation strategy, if necessary, would be developed in consultation with the Arizona State Historic Preservation Office and concerned tribal officials.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat. The California condor was listed as an endangered species in 1967. A

nonessential, experimental population of California condors has been established in Northern Arizona, and within Grand Canyon National Park the condor has the full protection of a threatened species. It has been determined by park staff that implementation of the preferred alternative "may affect, but is not likely to adversely affect" the California condor. This determination is based on the potential that condors could be attracted to the increased activity at the project site during construction. Mitigation measures have been developed jointly between park staff and the U.S. Fish and Wildlife Service (FWS) to minimize the potential for adverse impacts to the condor during project implementation. These measures are included as part of the proposed action. The FWS has been consulted and they concurred with the determination that condors may be affected, but are not likely to be adversely affected by the implementation of the preferred alternative. The Mexican spotted owl was listed as a threatened species in 1993 and parts of Grand Canyon National Park were designated as critical habitat in 2001. It has been determined by park staff that implementation of the preferred alternative "may affect, but is not likely to adversely affect" the Mexican spotted owl. This determination is based on the fact that owl habitat is not present within the project area, owls have not been detected in the project area, and most the project is greater than 0.5 miles away from the nearest provisional Protected Activity Center. The section of the project that is within 0.5 miles away from the nearest provisional Protected Activity Center will be constructed outside the owl's breeding season to reduce any potential impacts on the owls. The FWS has been consulted and concurred with the determination that spotted owls may be affected, but are not likely to be adversely affected by the implementation of the preferred alternative.

Whether the action threatens a violation of Federal, state, or local environmental protection law. The preferred alternative violates no federal, state, or local environmental protection laws.

#### IMPAIRMENT OF PARK RESOURCES OR VALUES

In addition to determining the environmental consequences of the preferred and other alternatives, National Park Service policy (Management Policies, 2001) requires analysis of potential effects to determine whether or not actions would impair park resources. fundamental purpose of the National Park System, established by the Organic Act and reaffirmed by the General Authorities Act as amended, begins with a mandate to conserve park resources and values. National Park Service managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts on park resources and values. However, the laws do give the National Park Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of the park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the National Park Service the management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement that the National Park Service must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible National Park Service manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. Impairment may result from National Park Service activities in managing the park, visitor activities, or activities undertaken by concessionaires, contractors, and others operating in the park. An impact to any park resource or

value may constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- Key to the natural or cultural integrity of the park; or
- Identified as a goal in the park's general management plan or other relevant NPS planning documents.

Because there would be no major adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Grand Canyon National Park; (2) key to the natural or cultural integrity of the park; or (3) identified as a goal in the park's general management plan or other relevant National Park Service planning documents, there would be no impairment of Grand Canyon National Park's resources or values as a result of implementation of the preferred alternative.

#### PUBLIC INVOLVEMENT

A public scoping letter for the Greenway Trail Segments in Undisturbed Areas project was sent to a mailing list of approximately 170 people on March 27, 2001. A press release was also issued and the scoping letter was posted on the park's website. The environmental assessment was made available for public review and comment between November 27, 2001 and January 2, 2002 through a combination of direct mailings, issuance of a press release and posting on the park's website. Equestrian users submitted comments to the park expressing that stock use should be allowed on the trail and it should strive to connect with the Arizona Trail. After careful consideration the Superintendent decided to include this use in a revised proposal and a revised environmental assessment was made available to the public as above between April 11, 2002 and May 24, 2002. Comments from the public on the revised environmental assessment are included in the errata sheet that is attached to this document.

The U.S. Fish and Wildlife Service was sent a copy of the EA, a Biological Assessment and an amendment to it, and the park's request for concurrence with the determination of effects to federally listed species. The April 2002 revised environmental assessment documented a determination of "may affect, not likely to adversely affect" for the California condor and a "may affect, not likely to adversely affect" determination for the Mexican spotted owl. The U.S. Fish and Wildlife Service concurred with these determinations. The Arizona State Historic Preservation Office also responded to the EA, stating concurrence with the determinations documented in the environmental assessment.

#### **CONCLUSION**

The preferred alternative does not constitute an action that normally requires preparation of an environmental impact statement (EIS). Negative environmental impacts that could occur are minor and temporary in effect. There are no unmitigated adverse impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, known ethnographic resources, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown

risks, cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection law.

Based on the foregoing, it has been determined that the project does not constitute a major federal action significantly affecting the quality of the human environment and an EIS will not be required for this project and thus will not be prepared.

Recommended:

Jeffrey cross
Science Center Director, Grand Canyon National Park

Recommended:

Joseph F. Alston
Superintendent, Grand Canyon National Park

Approved:

Karen P. Wade

Date

Date

Date

Date

Intermountain Regional Director

#### ERRATA SHEET

# Comment and Response Greenway Trail Segments in Undisturbed Areas Grand Canyon National Park, Coconino County, Arizona

The National Park Service (NPS) invited the public to review and comment on the revised Environmental Assessment (EA) released on November 27, 2001 for the proposed Greenway segments in undisturbed areas within Grand Canyon National Park. The revised EA was prepared in response to comments proposing equestrian use on the trail – a use not in the original proposal. After careful consideration, the NPS decided to include equestrian use in the revised trail proposal. Public comment was considered until May 24, 2002.

Five letters were received from interested agencies, groups and citizens. The letters were reviewed by the NPS Project Manager and third-party consultant responsible for preparing the EA. Substantive comments that warrant a response were identified and are provided below.

**Comment:** The Navajo Nation has requested that if resources are identified that resemble anything Navajo, that they be notified.

**Response:** The NPS acknowledges this request.

**Comment:** While there may be merit to creating a greenway trail, it may be a bit premature at this junction. Given the fact that there is serious Congressional scrutiny regarding the proposed light rail system, which has resulted in the NPS going back to the drawing board, there may be alternatives that make more sense than having a parking lot outside of the Park. The defeat of the proposed Canyon Forest Village development, which was to be the southern terminus of the proposed transit system also raises questions as to where the proposed transit hub would be located.

**Response:** The location of the transit hub is outside the scope of this analysis. Construction of the greenway trail system within the boundaries of the Park is not tied to nor has any bearing on the outcome of the Congressional review of the light rail system or the Canyon Forest Village proposal. The greenway trail system analyzed in this document refers only to the trails within the Park boundary. The completion of the trail to the southern terminus is a decision that will be made by the U.S. Forest Service.

**Comment:** There are several safety concerns with the proposed location of the trail system. For example, tourists may not be acclimated to the high altitude or in the best physical condition to undertake such physically demanding exercise as the trail system would require. It is entirely possible that such a person could suffer any multitude of ailments during such exertion. What will be the plan for responding to such a medical emergency? Will there be call boxes along the trail to summon emergency services? Will the trail be patrolled?

**Response:** The greenway trail system will become a part of the overall trail system that is managed by the NPS. As stated in the EA on page 10, rangers will routinely patrol the greenway trail, as they do all other trails in the Park. Call boxes will not be available

along the trail segment. The greenway trail system is much less dangerous than many of the trails open to the public within the Park; however, hikers/bikers and equestrian users of the trail are responsible for themselves and should not take any unnecessary risks. At the beginning of the trail there will be an information sign informing users of the length, degree of difficulty and the lack of services along the trail as well as other information.

Hiking/biking and equestrian riding at Grand Canyon National Park involves a certain amount of risk that every person assumes. Personal safety depends upon good judgment, based on experience and a realistic assessment of your hiking ability, as well as weather and route conditions. The NPS recommends that if you have any doubt as to your ability to safely complete a trip, that you do not attempt it. Everyone is responsible for his or her own safety and should hike intelligently.

**Comment:** The EA states that there will be two instances where Highway 64 will need to be crossed. What will be done to ensure safe crossing on such a busy highway during the summer months?

**Response:** The construction of the greenway trail across Highway 64 will comply with state and federal construction specifications and will follows guidelines set forth from the Arizona Department of Transportation and the Manual on Uniform Traffic Control Devices.

**Comment:** Under no circumstances should any part of the greenway trail be open to horses or other livestock. At the present time, and as long as I can remember, the Bright Angel Trail, and to a lesser degree, the South Kaibab Trail have been covered with steaming mule excrement and watered down with mule urine from top to bottom. In the winter the excrement and urine freezes into yellow piles of slush and scum. It is unpleasant to view and smell, dangerous to walk through, and environmentally destructive. Also, there is nothing green within reach of the mules along these trails.

**Response:** After careful consideration, the NPS decided to include equestrian use in the revised trail proposal. The greenway trail will not be used for mule trains that have the tendency to deposit large amounts of excrement and urine along the trail. Instead, it is anticipated that the greenway trail would be occasionally used by equestrians. Visitor use of the trail is expected to be light, and is merely an alternative means for someone to access the Park.

**Comment:** What lobbying group is trying to get support for this stupid, irrational, environmentally unsound proposal to allow horses on the greenway trail system?

**Response:** The decision to allow equestrian use of the greenway trail was made by the Park Superintendent in response to several individuals and groups that supported equestrian use of the greenway trail, including the Arizona Bicycle Club, Back Country Horsemen of America, Coconino County, and the Arizona Trail Association.

**Comment:** The hardened and asphalt surfaces are very unfriendly to horses and provide an environment for much higher speeds of bicyclists, which will endanger horsemen.

**Response:** The greenway trail will be constructed in such a way as to accommodate many types of users, instead of specifically designed for a single user. As stated in the EA on page 10, the hardened surface would be composed of aggregate and topsoil. This type of surface is not expected to provide an environment for high speeds from bicyclists. The EA also states on page 10 that paving would only be used in areas along the trail that may experience heavy runoff to prevent erosion.

**Comment:** With the future potentially bringing a situation where private vehicles will be restricted from the area near the South Rim, the potential use of the greenway trail may become very high and create a very negative environment and experience for horsemen due to extremely high usage.

**Response:** As stated in the previous response, the greenway trail will be constructed in such a way as to accommodate many types of users, instead of specifically designed for a single user. Although an estimate of the number of users has not been developed, trail use along this 7.0 mile segment of greenway trail is expected to be light – even if private vehicles are restricted from the South Rim area. However, should trail use increase to the point that it is negatively affecting users or the environment, alternative solutions would be evaluated to alleviate the concern.

**Comment:** Our proposed solution is to keep open the possibility in the future of a somewhat parallel and primarily equestrian trail or more primitive type of trail that will not attract the speed and volume of users.

**Response:** The decision made on this greenway trail segment does not prevent the evaluation of future projects. Should trail use increase to the point that it is negatively affecting users or the environment, NPS staff would evaluate alternative solutions to alleviate the concerns. Any future projects would be subject to federal regulations, policies, and management guidelines.

#### **ERRATA SHEET**

### Greenway Trail Segments in Undisturbed Areas Grand Canyon National Park, Coconino County, Arizona

Page 19 under Cultural Resources Alternative B (Proposed Action) paragraph 2 change "No improvements would be made to the existing historic entrance road" to "Improvements would be made to the existing historic entrance road to meet grade, surface, and drainage requirements while maintaining the existing alignment"

Page 43 paragraph 3 change "No improvements would be made to the existing historic entrance road" to "Improvements would be made to the existing historic entrance road to meet grade, surface, and drainage requirements while maintaining the existing alignment"